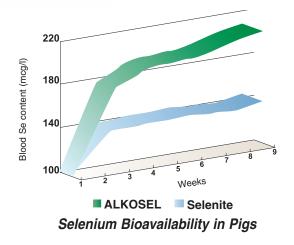


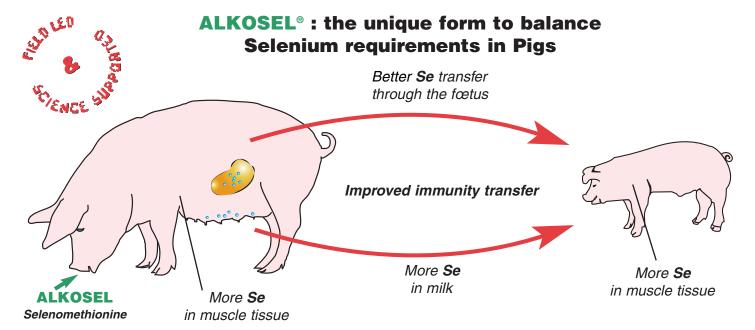
ALKOSEL is an inactivated whole cell yeast product containing elevated levels of **organic Selenium**.

Occurring in its natural food form L(+) Selenomethionine, Selenium contained in **ALKOSEL** is highly bioavailable.

This greater bioavailability ensures improved Selenium reserves for the animal as well as an enhanced Selenium transfer to the piglet through the fœtus, and the milk.

ALKOSEL is a unique form to deliver Selenium benefits in pigs.





Increase of Sel	Improved Transfer		
Health / Reproduction	Products Quality	of Maternal Selenium	
Semen Quality (volume, motility,)	Milk Quality: Incidence of subclinical mastitis	Immune Status Improved transfer of	
Farrowing Duration	Milk Se content	passive immunity and better resistance to stress	
Stress Resistance Reinforced immune status	Meat Quality: Drip Loss	Muscular Tone Lower risks of occurrence of muscular deficiencies	
Selenium Deficiencies	Oxidation risks (colour, pH, shelf life)	Selenium Deficiencies	





ALKOSEL®: A Concentrate of Selenomethionine

Manufactured within Lallemand facilities, **ALKOSEL** is obtained by fermentation of selected strains of *Saccharomyces cerevisiae* grown in the presence of measured amounts of Selenium.

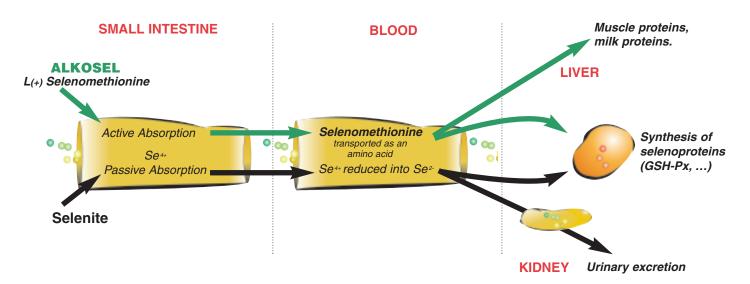
During fermentation, live yeast cells absorb surrounding Selenium and store it as L(+) Selenomethionine.

Selenomethionine is a highly bioavailable form of Selenium for animals.

L(+) Selenomethionine content is analysed, standardised and guaranteed for each manufacturing batch.



ALKOSEL® / Selenite: A Different Mode of Absorption



Contrary to classic inorganic Selenium, organic Selenium contained in **ALKOSEL** remains stable and is absorbed as an amino acid.

L(+) Selenomethionine is the same natural form of Selenium as found in plants and cereals.

The high concentration of L(+) Selenomethionine in **ALKOSEL** guarantees improved Selenium absorption for the animal within the small intestine.

Selenium and Vitamin E have a complementary role to protect cell against oxidation.

Vitamin E has a protective action at the cell wall level whereas **Selenium** acts at the intracellular fluid level.

A good combination of antioxidants ensures an optimal protection of cells integrity.

ALKOSEL®: Recommended Use

	Sows	Piglets	Fattening Pigs	Boars
Inclusion stage	Gestation/Lactation	Starter Feed up to 30 kg	Growth 30 kg to slaughter	Reproduction
Compound Feed (in g of ALKOSEL/ton)	50 - 150 g/t* ie 0.1 to 0.3 ppm of Se	50 - 150 g/t* ie 0.1 to 0.3 ppm of Se	100 - 200 g/t* ie 0.2 to 0.4 ppm of Se	200 g/t* ie 0.4 ppm of Se

^{*} These recommendations have to be adjusted according to the physiological status of the animal and to the specificity of the diet. Maximum total Selenium level in compound feed is 0.5 ppm.